Does Experience in a Business Incubator Increase Student Entrepreneurial Intentions?

Laurel F. Ofstein

Western Michigan University, laurel.ofstein@wmich.edu

Follow this and additional works at: http://scholarworks.wmich.edu/spring_convocation

Part of the Entrepreneurial and Small Business Operations Commons

WMU ScholarWorks Citation
http://scholarworks.wmich.edu/spring_convocation/4

This Presentation is brought to you for free and open access by the Office of the Vice President for Research at ScholarWorks at WMU. It has been accepted for inclusion in Spring Convocation by an authorized administrator of ScholarWorks at WMU. For more information, please contact mail@wmich.edu.
Does Experience in a Business Incubator Increase Student Entrepreneurial Intentions?

Laurel F. Ofstein, PhD
Assistant Professor of Management

Co-Authors:
Sophie C. Bacq, Northeastern University
Jill R. Kickul, New York University
Lisa K. Gundry, DePaul University
Why does an individual choose to engage in entrepreneurship?
Why does an individual choose to engage in entrepreneurship?

- Premise: entrepreneurship is a deliberate career choice and, as such, is cognitive in nature

- Social cognition literature: career choice is best predicted by intentions (Lent, Brown, & Hackett, 1994)

- An entrepreneurship career is best predicted by an entrepreneur’s intentions to set up a new venture instead of joining an existing one (Davidsson, 1991; Katz, 1992; Krueger, Reilly, & Carsrud, 2000)

Entrepreneurial intentions + their antecedents

Individual

Environmental
What is a business incubator?

- An company that provides services such as training or office space to new startup companies
- Focused on startup and early stage companies
- An incubator may provide services such as:
  - Help with business basics
  - Networking
  - Marketing
  - Presentation skills
  - Links to strategic partners
- Businesses must apply for admission
- Accelerators (such as Starting Gate here at WMU) compress the incubator timeline into a “boot camp” style process
Entrepreneurial Intentions Antecedents

- **Individual Predictors**
  - Entrepreneurial self-efficacy is one of strongest predictors of entrepreneurial intentions  
    (Chen, Greene, & Crick, 1998; De Noble, Jung, & Ehrlich, 1999; Jung, Ehrlich, De Noble, & Baik, 2001; Krueger et al., 2000; Scott & Twomey, 1988)

- **Environmental Predictors**
  - Academic experience, # ventures started prior to and during university programs, and alumni new business creation  
    (Bae, Qian, Miao, & Fiet, 2014; Charney & Libecap, 2000; Peterman & Kennedy, 2003; Sanchez, 2013)
  - Prior industry and venture experience  
    (Fiet, 1995; Gimeno, Folta, Cooper, & Woo, 1997; Robinson & Sexton, 1994; Rotefoss & Kolvereid, 2005)
  - Mentoring systems and student incubators in universities  
    (Jang, 2013; Pruett, Powell, & Toney, 2008)

- **Possible interaction not empirically tested to date**  
  (Tang & Tang, 2007)
Role of “Entrepreneurial Munificence”

- Positive role of “entrepreneurial munificence”
  - The scarcity or abundance of critical resources needed by aspiring entrepreneurs to operate within an environment (Tang, 2008)
  - Robust infrastructure, easily accessible skills and role models, access to financial support and government incentives (Dubini, 1988; Gnyawali & Fogel, 1994; Korunka et al., 2003; Tang & Tang, 2007)

- Business incubators have been found to have favorable outcomes for the surrounding area in terms of:
  - Recruiting & retaining entrepreneurial businesses
  - Job creation
  - Supporting the creation of fiscal revenues (Eshun, 2004)
Research Objective

- Incubators provide opportunities to develop mentoring relationships and networks, entrepreneurship knowledge and skills, and to observe launch and growth practices (Zhao, Seibert, & Hills, 2005)
- Yet, the effects of the presence of an incubator on the rate of start-up creation in a given environment have not been examined

→ To empirically examine the extent to which entrepreneurial munificence (experience in an incubator setting) indirectly increases an individual’s intentions to become an entrepreneur
Social Cognitive Theory (SCT)

- SCT blends cognitive, behavioral and environmental perspectives (Hmieleski & Baron, 2009)
- SCT provides a useful framework to study the mechanisms through which cognitive and environmental factors interact to explain entrepreneurial intentions
- “Triadic reciprocality” (Bandura, 1986) Human actions (or intentions to act) are influenced by the interaction between both cognitive factors and environmental events
COGNITIVE FACTORS

- Achievement Motivation
- Risk-Taking Propensity
- Entrepreneurial Self-Efficacy

ENVIRONMENTAL FACTORS

- Entrepreneurial Munificence

BEHAVIORS AND INTENTIONS TO ACT

- Entrepreneurial Intentions

“Triadic Reciprocality,” adapted from Bandura (1986)
Risk-Taking Propensity

Entrepreneurial Self-Efficacy

Achievement Motivation

Entrepreneurial Munificence

Control Variables
- Gender
- Immigration status
- Employment status

H1
H2
H3
H4
H5
H6

Entrepreneurial Intentions
Cognitive factors → Entrepreneurial intentions

- Hypothesis 1: Achievement motivation positively relates to entrepreneurial intentions.
- Hypothesis 2: Achievement motivation positively relates to risk-taking propensity.
- Hypothesis 3: Risk-taking propensity positively relates to entrepreneurial self-efficacy.
- Hypothesis 4: Entrepreneurial self-efficacy positively relates to entrepreneurial intentions.
Entrepreneurial Munificence as a Moderator

- **Hypothesis 5:** Entrepreneurial munificence strengthens the effect of risk-taking propensity on entrepreneurial self-efficacy.
  - When given the opportunity to work alongside entrepreneurs within an incubator setting, individuals may more acutely learn and develop entrepreneurial skills and capabilities central to the start-up process.

- **Hypothesis 6:** Entrepreneurial munificence strengthens the effect of entrepreneurial self-efficacy on entrepreneurial intentions.
  - Incubators provide prospective entrepreneurs social capital (mentoring relationships) to assist them in deploying their capabilities as they consider launching their own entrepreneurial venture.
  - The acquisition of entrepreneurship knowledge and skills, as well as the social support, intensifies the entrepreneurial self-efficacy—entrepreneurial intentions relationship.
Method – Data

Sample
- Unique entrepreneurially munificent environment: New York City Accelerator for a Clean and Resilient Economy (NYC ACRE)
- 106 MBA students, 34 worked in the incubator for 5+ months
  - 43% male, 57% female
  - Average age of 24.90
  - 35% currently employed

Data Analysis
- Multiple hierarchical regression
- Tested for common method bias
## Results

<table>
<thead>
<tr>
<th>H#</th>
<th>Tested Effect</th>
<th>Hyp. Sign</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Achievement Motivation $\rightarrow$ Entr. Intentions</td>
<td>+</td>
<td>✓ $\beta = .25, p &lt; .01$</td>
</tr>
<tr>
<td>H2</td>
<td>Achievement Motivation $\rightarrow$ Risk-Taking Prop.</td>
<td>+</td>
<td>✓ $\beta = .40, p &lt; .001$</td>
</tr>
<tr>
<td>H4</td>
<td>Entr. Self-Efficacy $\rightarrow$ Entr. Intentions</td>
<td>+</td>
<td>✓ $\beta = .18, p = .069$</td>
</tr>
<tr>
<td>H5</td>
<td>Entr. Munificence $\ast$ Risk-Taking Prop. $\rightarrow$ Entr. Self-Efficacy</td>
<td>+</td>
<td>✓ $\beta = .89, p &lt; .001$</td>
</tr>
<tr>
<td>H6</td>
<td>Entr. Munificence $\ast$ Entr. Self-Efficacy $\rightarrow$ Entr. Intentions</td>
<td>+</td>
<td>✓ $\beta = 1.94, p &lt; .01$</td>
</tr>
</tbody>
</table>
1. Extend SCT to the study of entrepreneurial intentions by looking at the triadic reciprocality of cognitive factors (achievement motivation, risk-taking propensity and entrepreneurial self-efficacy), the environment, and individual intentions to engage in entrepreneurship.

2. Introduce and empirically demonstrate the moderating effect of entrepreneurial munificence on the entrepreneurial self-efficacy—entrepreneurial intentions relationship.
Future Research Opportunities

- Lagged measure of decision to engage in entrepreneurship
- Rise in the number of incubators, accelerators, and collaborative spaces in which entrepreneurs and newly launched enterprises congregate in cities and across regions (Lopez, 2013)
  - New research opportunities for entrepreneurial munificence
  - Develop the dimensions of entrepreneurial munificence
- Extend our logic to entrepreneurially munificent environments beyond an incubator setting
  - Replicate our study to full-time/part-time employees
  - Replicate our study within organizations (corporate entrepreneurship)
THANK YOU!

Contact information: laurel.ofstein@wmich.edu